

John W. James, State Climatologist
University of Nevada, Reno
116 Mackay Science Hall / 154
Reno, Nevada 89557-0118

29-Un3629c

4: 2004-5

c.1



Telephone: (775) 784-1723
E-mail: nclimate@scs.unr.edu
Fax: (775) 784-1058

Nevada State Library
and Archives ①

JUN 22 2004

STATE PUBLICATIONS

NEVADA CLIMATE SUMMARY

MAY 2004

Volume 21, Number 5

This is the final report from John James, who has served Nevada for 23 years as State Climatologist. When he took over way back in 1981, James had four major goals for the Nevada State Climate Office. One, a very strong cooperative volunteer network would be installed as a supplement to the already operating National Weather Service stations. These new stations would fill in the gaps in the National Weather Service Network and would give a better look at Nevada's diverse climate. The NWS has graciously supplied the equipment for the weather stations, but maintenance requirements will be ongoing. The second goal was the installation of high mountain storage gages, between 7000 to 9000 feet or higher. The data gathered by these stations would allow for a much better knowledge of runoff in those remote unpopulated mountain areas. This is especially important in a water-starved state like Nevada. To accomplish this goal 10-15 stations were installed and twice a year are visited to collect the precipitation data. Again except for maintenance requirements this goal has been accomplished. The third goal was obtaining information about the water balance by installing evaporation equipment and locating volunteer observers. How do we balance water uses and plan for the future with such a poor coverage of information? This goal needs the most action. The fourth goal was to involve the public concerning the importance of the Nevada's climate

network and how it might be used in the future. This information should be available to all those people who have an interest in climate information. Data can be obtained from the State Climate Office or older data located at the State Archives in Carson City can be visited by appointment.

What has happened to climate studies in Nevada for the past 150 years? The first data collection was back in the 1860's when the United States Army Signal Corp. gathered rainfall data. These were sporadic observations from places like Forts Churchill and McDermitt and Camp Halleck, etc. In 1870, the National Weather Service was created within the U.S. Army Signal Corp. and weather records were more complete and consistent. Most of Nevada's railroad stations had complete weather stations by the 1870's with the good volunteers in the hinterlands continuing. In Nevada, a very unique situation existed wherein a local jeweler named Charles Friend had a backyard weather observatory located a block from the Nevada State Capitol. His observations date from 1883 to 1905. In the interim, Friend, used his position as Director of the newly established Nevada Weather Service. Friend's duties were to collect data from volunteer cooperative observers, to archive the data and publish the monthly weather report and write monthly summaries. His report was sent to all interested parties. (Frankly, this is exactly what we are doing today and have been for the last 23 years). After Friend died in 1905, the law allowing for a State Weather Service stayed on the books until 1912, but was never utilized and there was never another director appointed. In 1940, the NWS moved it's main weather station from Carson City to downtown Reno, with a supplemental station at the Reno Airport. In 1954, the National Weather Service's Climatological Division created the State Climate program with various State Climatologists from nearby Utah and California. These climatologists were either paid by the federal government or the university or in the case of Nevada the program wasn't funded at all. In lieu of that, climatologists in San Francisco wrote monthly summaries for Nevada. In 1958 the first Nevada State Climatologist made a report, but he was still a Utah resident. Finally in 1969, Clarence Sakamoto, a Professor at the University of Nevada at the Plant Soils and Water Science Division, completed the first weather summary as State Climatologist. Only four years after his initial effort, the program was abandoned and placed with NOAA. Each governor was asked to establish his or her

own State Climatologist Program, Nevada did not do this. So the program was to be divided up between the bordering states, especially Utah, or completely forgotten about. In 1981, John James a professor at UNR became the unofficial Nevada State Climatologist. Early funds to operate the State Climate Program were supplied by the State Climatologist out his own pocket. The Nevada law was not made official until 1984. The law stated that the appointment of the Climatologist be made with the approval of the NOAA, the NWS and the University system. The State Climatologist duties were spelled out in this law as to collect climatic data for the State and make the observations available to the public. In reality, the Nevada Monthly Summary, with mailings over much of the western U.S. has continued under James's efforts.

For the time being, this will be the last Drought Monitor Analysis. Is there or isn't there a drought? No one who isn't color sensitive can look at the June 1, 2004 U.S. Drought Monitor map and not believe we are in dire straits throughout most of Nevada, in this case dire straits isn't a band, but if it was and they put on a concert in Caliente, they better bring their own water to drink, because along with two-thirds of Nevada, Caliente, Pioche, Ely, Eureka, Austin, McDermitt, etc. are experiencing extreme drought conditions. Northeastern Nevada has "only" moderate drought. This tells part of the story. It does not get down to the nitty gritty of what four to five years of continuous drought has done to our groundwater as well as surface water levels. Surface water is very easily depleted and easily noticeable. However, as dire straits begin it's second set we realize that dryness on the surface extends down several feet. Well water is being drawn down to where it is no longer useable, new expensive drilling would have to take it's place. Springs and creeks are drying up, so wildlife has to be carefully monitored. Fisheries are drying up or being completely depleted. More water needs to be poured on the desert landscape if our domesticated plants that seemingly go on despite drought should be watered more and more and more. Urban areas should get by unless things really deteriorate. This deterioration occurs two ways, by the persistence and intensity of drought and by the amount of difference between what's normal and what's dry. In other words, how much rain and snow we have received.

I wish all of you a fine future, one that will be satisfying and bring much happiness for you and yours. It has been a great quarter century for me. I will never forget it or all you who made it possible.

NOTE: A special thanks to my dedicated assistant, Kara Amestoy, who after wading through my poor penmanship still managed to make some sense out of what I was trying to say. This office could not have operated without her for the past 11 years. Also to Ted Hendricks the smoothest operating Climatological technician that Nevada will ever have.

John W. James

Nevada State Climatologist

STATE CLIMATE OFFICE WEATHER STATIONS

(TEN OR MORE YEARS OF SERVICE)

<u>YRS.</u>	<u>LOCATION</u>
45	Honey Lake – Fleming Fish & Game*
33	Incline Village – John James and Ed Coppin
19	Kyle Canyon – Nevada Division of Forestry
18	Manhattan – Phamie Parker
18	Winnemucca Rinaudo – Gary Rinaudo
15	Red Rock Valley – Shirley Hesselschwerdt
15	Tonopah Downtown – Water Office
15	Fallon NAS – United States Navy Meteorology Office
14	Desert Valley/Sleeper Mine – Glenn Alexander
13	Overton – Delmar Leatham, Power Company
13	Overton Beach – Lake Mead Natl. Rec. Area – Ranger William Cullop
13	Boulder Beach – Sue Knowles, Lake Mead National Recreation Area
12	Belmont – Tom Kniefel
12	Minden – Ted Hendricks
12	Fernley – Betty Jackson
11	Las Vegas Spanish Hills – Lori James
11	San Jacinto – Dave Secrist (Closed)
11	Sheridan Acres – George Uebele
11	Lee Canyon – Steve Brittingham
10	Boies Ranch – Marla Griswold
10	Flanigan – Pat Farias
10	Ruby Valley – Ben Neff
10	Wellington – John Weaver
10	Pioche/Lister – Ruby Lister

* Installed by John James, California Department of Water resources. Summer 1958.

LESS THAN TEN YEARS

Bare Ranch John Estil
Cold Springs – Rudy Cruz
Dayton – Bill Hunt
Hualapai Valley – Tiffany Keller
UNR – Geography Department
Vya/Shoestring Ranch – Alice Gladwill
Sulfur – Hycroft
Marietta – Jim Davis
Schurz – Elveda Martinez
Flying M Ranch – Robin Paine
Wilson Canyon
Gardnerville – Jerry Noosinow
Jack's Valley – John Richardson
Lahontan Fish Hatchery
Stillwater – Bill Oar
Echo Bay Mine
Reese River Hoard – Jeff Hoard
Charleston – Marge Prunty (Now a NWS Station)
Jarbidge – Rey Nystrom
Midas Mine – James Gelhaus
Sandy Valley – Paul Muskat
Amargosa Valley – Jean Garey
Gabbs – Norman Thompson
Cathedral Gorge – Nevada State Parks
Carson City – Bob Gagnon
Goldpoint – Karen Anderson

Many, many thanks to these volunteer weather observers. Without them we would know very little about Nevada's diverse climate.

NEVADA TEMPERATURE EXTREMES

January

87°	Logandale		1914
-50°	San Jacinto	8 th	1937 State Record Low

February

93°	Laughlin	26 th	1986
-42°	Carlin Newmont	6 th	1989

March

101°	Rioville		1903
-33°	Diamond Valley	9 th	1969

April

106°	Laughlin/Cottonwood Cove	7 th	1989
-12°	Ruth	22 nd	1963

May

116°	Calville Bay	24 th	2000
-7°	Pine Valley	9 th	1990

June

125°	Laughlin	29 th	1994 State Record High
8°	Belmont	1 st	1891

July

124°	Laughlin	28 th	1995 Newest
16°	Charleston	31 st	1995 Newest

August

121°	Cottonwood Cove	10 th	1992
10°	Charleston & San Jacinto		1992

September

118°	Rioville		1888 Oldest
0°	Carlin	22 nd	1895

October

109°	Cottonwood Cove	1 st	1980
-10°	Mountain City	27 th	1970

November

98°	Mesquite	3 rd	1944
-33°	Charleston	25 th	1993

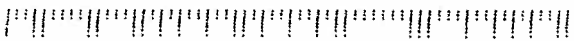
December

91°	Las Vegas	9 th & 11 th	1910
-46°	Mountain City	22 nd	1990

Nevada State Climatologist
University of Nevada, Reno
116 Mackay Science Hall, ms-154
Reno Nevada 89557

PHYLLIS SARGENT
STATE LIBRARY SERVICES
100 N. STEWART ST.
CARSON CITY, NV 89701-4285

89701-4285 28



Nonprofit Org.
U.S. Postage
PAID
Reno, Nevada
Permit No. 26